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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,715	06/26/2003	Benjamin Thomas Percer	200312936-1	5780
22879 7590 02/20/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER LE, JOHN H	
			ART UNIT	PAPER NUMBER
			2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/606,715

Applicant(s)

PERCER ET AL.

Examiner

John H. Le

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-32 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. This office action is in response to applicant's response received on 11/29/2006.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 24-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claims must have either physical transformation and/or a useful, concrete and tangible result. The claims fail to include transformation from one physical state to another. Although, the claims appear useful and concrete, there does not appear to be tangible result claimed.

Regarding claims 24-30, merely generating at least one signal indicative of absence of faults would not appear to be sufficient to constitute a tangible result, since the outcome of the generating step has not been used in a disclosed practical application nor made available in such a manner that it's usefulness in a disclosed practical application can be realized (e.g., in some instances, if it was "conveyed to someone" or "display" or "stored by user", that would establish a tangible result). Therefore, claim(s) 24-30 appear(s) non-statutory.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-9, 13, 15-17, 22, 24-26, 29, and 30-32 are rejected under 35

U.S.C. 102(e) as being anticipated by Coyle et al. (USP 6,546,507).

Regarding claims 1, 22, 24, and 31, Coyle et al. disclose a system for margin testing one or more components of an electronic system (computer's bus system)(Fig.25, Col.33, lines 8-13, Col.34, lines 7-20), comprising a fault bypass module (a failure capture module 2506) incorporated in said electronic system (bus 2502), said fault bypass module (failure capture module 2506) configured to indicate of one or more faults associated with one or more of said components (bus 2502) during margin testing of said electronic system (e.g. Fig.25, Col.34, lines 50-65, Col.35, lines 18-30, Col.36, lines 23-34) and mask the at least one signal indicative of one or more faults (not pass the value) by generating at least one signal indicative of absence of the one or more faults (pass the value) (e.g. Figs.28C, 28D, Col.39, line 42-Col.40, line 12); and an internal controller (a program control module 2512) in communication with said fault bypass module (failure capture module 2506), said internal controller configured to transmit a command to said fault bypass module to initiate masking of said fault signals by said module (e.g. Fig.25, Col.34, lines 62-65, Col.39, line 42-Col.40, line 12).

Regarding claim 32, Coyle et al. disclose a computer server (e.g. Col.31, lines 21-23, 31-35, Col.32, lines 59-62), comprising a margin testing system for margin testing one or more components of the computer server (e.g. Fig.25, Col.34, lines 50-65, Col.35, lines 18-30, Col.36, lines 23-34), the margin testing system comprising: a fault bypass module (a failure capture module 2506) incorporated in said computer server (bus 2502 of computer sever); said fault bypass module configured to mask signals indicative of one or more faults associated with one or more of said components during margin testing of said computer server (e.g. Fig.25, Col.34, lines 62-65, Figs.28C, 28D, Col.39, line 42-Col.40, line 12).

Regarding claim 2, Coyle et al. disclose at least one of said one or more faults corresponds to an operating parameter associated with at least one of said one or more components crossing a selected threshold (e.g. Col.35, lines 50-65).

Regarding claim 3, Coyle et al. disclose said operating parameter is any of voltage (e.g. Col.35, lines 50-65).

Regarding claim 4, Coyle et al. disclose a controller (program control module 2512) incorporated in said electronic system and in communication with said fault bypass module (failure capture module 2506), said controller configured to transmit a command to said fault bypass module to initiate masking of said fault signals by said module (e.g. Fig.25, Col.34, lines 62-65, Col.39, line 42-Col.40, line 12).

Regarding claim 5, Coyle et al. disclose said fault signals comprise one or more interrupt signals (e.g. Col.14, lines 36-48, Col.30 lines 60-63, Col.44, lines 28-32).

Regarding claim 6, Coyle et al. disclose said fault bypass module permits normal processing of said fault signals during normal operation of said electronic system (e.g. Col.9, lines 35-39, Col.37, lines 28-32).

Regarding claim 7, Coyle et al. disclose a hardware monitor (stress injection module 2504) configured to communication with said controller (program control module 2512) and with at least one of said one or more components (failure capture module 2506), and to generate a fault signal in response to an occurrence of a fault associated with said at least one component (failure capture module 2506) (e.g. Fig.25, Col.35, lines 5-30).

Regarding claim 8, Coyle et al. disclose said hardware monitor (stress injection module 2504) is further configured to transmit said fault signal to said fault bypass module (failure capture module 2506), and wherein said fault bypass module (failure capture module 2506) is further configured to mask said received fault signal during margin testing of said electronic device (e.g. Fig.25, Col.35, lines 5-30, Col.36, lines 23-29).

Regarding claims 9 and 25, Coyle et al. disclose a power control element (program control module 2512 (JTAG controller), Fig.16, Col.22, line 51-Col.23, lines36) in communication with said fault bypass module (2506), said fault bypass module transmitting one of more of said fault signals to said power control element in absence of margin testing and masking said one or more fault signals during margin testing of said electronic system (e.g. Fig.25, Col.34, lines 50-65).

Regarding claim 10, Coyle et al. disclose said fault bypass module (failure capture module 2506) masks said fault signal by intercepting (capturing) said fault signal (e.g. Fig.25, Col.34, lines 56-65, Col.39, line 42-Col.40, line 12) and supplying to said power control element (2512) (e.g. Fig.25, Col.34, lines 50-65) a signal indicative of absence of a fault indicated by said fault signal (pass the value) (e.g. Figs.28C, 28D, Col.39, line 42-Col.40, line 12).

Regarding claim 13, Coyle et al. disclose a programmable logic device (FFM logic 120) programmed to provide masking of said fault signals (e.g. Col.35, lines 18-26).

Regarding claims 15 and 29, Coyle et al. disclose said fault bypass module (failure capture module 2506) is further configured to intercept a selected output signal of said at least one component and to generate a simulated signal corresponding to said intercepted output signal (e.g. Col.14, lines 36-48, Col.30 lines 60-63, Col.44, lines 28-32) for transmittal to said hardware monitor (stress injection module 2504) during margin testing of said component (e.g. Fig.25, Col.35, lines 5-30, Col.36, lines 23-29).

Regarding claim 16, Coyle et al. disclose said electronic system comprises a computer system (e.g. Col.31, lines 31-35, Col.32, lines 59-62).

Regarding claim 17, Coyle et al. disclose computer system is a computer server (e.g. Col.31, lines 21-23).

Regarding claim 30, Coyle et al. disclose said electronic system is a computer server (e.g. Col.31, lines 21-23, 31-35, Col.32, lines 59-62).

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coyle et al. (USP 6,546,507) in view of Taraci et al. (USP 5,119,021).

Regarding claim 14, Coyle et al. fail to disclose a temperature diode coupled to at least one of said components and configured to measure a temperature of said component and to supply said measured temperature to said hardware monitor.

Taraci et al. teach a temperature diode coupled to at least one of said components and configured to measure a temperature of said component and to supply said measured temperature to said hardware monitor (e.g. Col.6, lines 13-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a temperature diode coupled to at least one of said components and configured to measure a temperature of said component and to supply said measured temperature to said hardware monitor as taught by Taraci et al. in a margin test method of Coyle et al. for the purpose of providing a method and apparatus for maintaining a desired case temperature of an electrically operating device undergoing a burn-in test (Taraci et al., Col.3, lines 65-68).

8. Claim 18-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coyle et al. (USP 6,546,507) in view of Hawkins et al. (US 2003/0130969 A1).

Regarding claims 18-21 and 23, Coyle et al. fail to disclose a controller comprises a Baseboard Management Controller (BMC), wherein said communication bus is an Inter-Integrated Circuit bus (I²C bus), wherein said I²C bus is Intelligent Platform Management Bus (IPMB).

Hawkins et al. disclose a controller comprises a Baseboard Management Controller (BMC) ([0015]-[0017]), wherein said communication bus is an Inter-Integrated Circuit bus (I²C bus) ([0006]), wherein said I²C bus is IPMB ([0013]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a Baseboard Management Controller (BMC), an Inter-Integrated Circuit bus (I²C bus), wherein said I²C bus is Intelligent Platform Management Bus (IPMB) as taught by Hawkins et al. in a margin test method of Coyle et al. for the purpose of providing a star Intelligent Platform Management Bus Topology.

Allowable Subject Matter

9. Claims 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 27-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 11, in combination with other limitations of the claims, none of the prior art of record teaches or suggests the combination of a margin testing system for margin testing one or more components of the computer system, comprising: a hardware monitor in communication with said controller and with at least one of said components, said hardware generating an fault signal in response to occurrence of a fault associated with said at least one component; wherein said at least one component is a power rail, and said hardware monitor generates an interrupt signal in response to a voltage associated with said power rail varying from a nominal value by more than a selected threshold. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 27, in combination with other limitations of the claims, none of the prior art of record teaches or suggests the combination of a method of masking faults during margin testing of an electronic system, comprising: generating an interrupt signal in response to a voltage associated with a power rail varying from a nominal value by more than a selected threshold. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Response to Arguments

11. Applicant's arguments filed 11/29/2006 have been fully considered but they are not persuasive.

-Applicant argues that the prior did not teach, "fault bypass module configured to indicate of one or more faults associated with one or more of said components during margin testing of said electronic system and mask the at least one signal indicative of one or more faults by generating at least one signal indicative of absence of the one or more faults" as cited in claims 1, 22, 24, and 31.

Examiner position is that Coyle et al. teach fault bypass module (a failure capture module 2506) configured to indicate of one or more faults associated with one or more of said components (bus 2502) during margin testing of said electronic system (e.g. Fig.25, Col.34, lines 50-65, Col.35, lines 18-30, Col.36, lines 23-34) and mask the at least one signal indicative of one or more faults (not pass the value) by generating at least one signal indicative of absence of the one or more faults (pass the value) (e.g. Figs.28C, 28D, Col.39, line 42-Col.40, line 12).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is 571 272 2275. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John H. Le

Patent Examiner-Group 2863

February 13, 2007


John Barlow
Supervisory Patent Examiner
Technology Center 2800